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Sun-Maid Growers of California

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June 24, 2013

Mr. W. Dale Harvey
Senior Engineer
California Regional Water Quality Control Board
1685 E. Street
Fresno, CA 93706-2025

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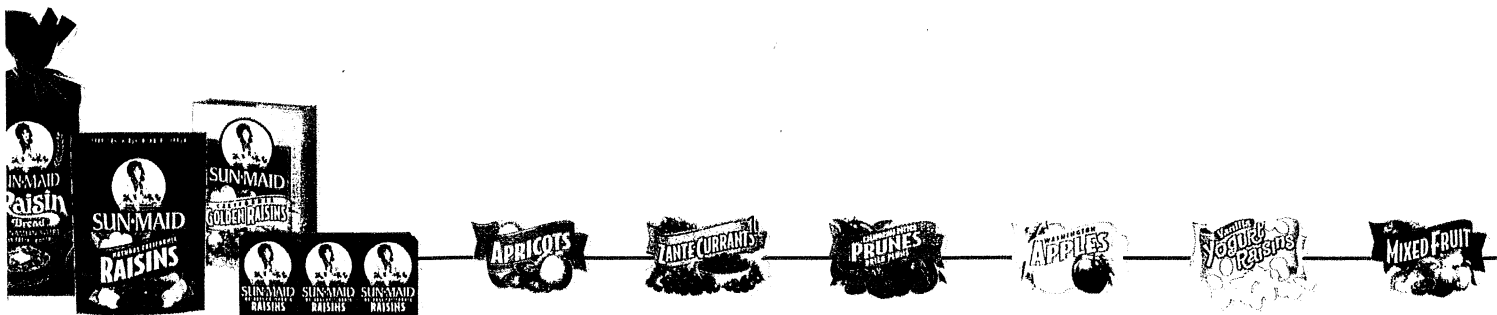
RWQCB-CVR
FRESNO, CALIF.

Re: Sun-Maid Growers of California, Kingsburg Facility
Response to Tentative Waste Discharge Requirements

Dear Mr. Harvey:

We have performed a detailed review of the Tentative Waste Discharge Requirements (TWDR) published by the California Regional Water Quality Control Board (Regional Board) working jointly with Donald Ikemiya of Provost & Pritchard Consulting Group and Nat Dellavalle of Dellavalle Laboratory. As we discussed during our last meeting at your office, we feel a cycle minimum duration limit based on "days" for the Biochemical Oxygen Demand (BOD₅) loading rate does not take into consideration the agronomic interactions of the soil, water and crops and the physical operation of the sprinkler irrigation system.

Sun-Maid's proposed permit provides for the application of raisin process waste water on an 81.1 acre land application field (three parcels) using sprinkler irrigation. To more accurately monitor flows and provide for the uniform application of water, the land application areas have been divided into 35 zones with separate sprinklers for each zone. Each zone consists of approximately 2.3 acres. The discharge onto any of the 35 zones will typically not exceed a maximum of 120 minutes per zone per day and is typically 30 minutes. Shorter application periods will occur during periods of lower evapotranspiration while longer application durations (not to exceed 120 minutes/zone) will take place in the months of greater evapotranspiration. Sun-Maid does not apply its waste water to any of the three parcels comprising the 81.1 acres for a 24 hour "day" period.



For a sprinkler irrigation system, the TWDR should not utilize the time period of "days" for limiting application and rest periods. The primary limiting component is the BOD loading of 150 pounds/acre/day which Sun-Maid accepts. Sun-Maid proposes the application period not exceed 120 minutes per zone with rest periods of two times the application period. Simply put, if water is applied for one-hour to a zone, a minimum rest period of two hours must take place for that zone. Sun-Maid believes that this cycle condition is the appropriate one for Sun-Maid's sprinkler system.

To further support the irrigation application program we propose (shorter cycles of 30 to 120 minutes per zone instead of application days on and days off), we feel it is prudent to contrast Sun-Maid's activities to the agricultural region of the Salinas Valley. We've included graphs created from data extracted from the California Irrigation Management Information System (CIMIS) to illustrate the evapotranspiration (ETo) and temperatures for each of the two regions. Both produce annual crops, both are farmed year round and both typically utilize sprinkler irrigation systems. As you review the material on a 12 month basis, you will see there are significant variances in ETo and temperatures. The Fresno region is more conducive to varying the application cycles as proposed by Sun-Maid, with longer application periods taking place during the warmer months and shorter cycles the remainder of the year. The Salinas data indicates an irrigation schedule which would not fluctuate nearly as much, with each application period being of a more uniform duration. We also conclude there would be a greater consumptive use by the crops in the Fresno region over the warmer period, thus justifying a longer application duration.

This correspondence includes technical comments and recommendations by Provost & Pritchard and Dellavalle that propose and justify best management practices that will effectively manage the discharge of wastewater to Sun-Maid's reclamation fields.

Sun-Maid Growers of California is 100 year-old cooperative owned by its 750 farmer members. Located between Selma and Kingsburg, California, Sun-Maid employs nearly 800 people year-round making it one of the largest employers in the San Joaquin Valley. Additionally, as the largest processor of raisins in the world, Sun-Maid's markets its healthy and nutritious dried fruit products to over 50 countries worldwide.

The cleaning and processing of raisins requires the use of a substantial amount of water to insure the consuming public is purchasing a clean and safe product. Over the years, Sun-Maid has performed continuous improvement activities to make its operation more efficient and more receptive to the stringent demands by its buyers to deliver products that are cleaner and with fewer defects than in the past. Similarly, Sun-Maid understands the requirements for wastewater reuse should also be more stringent however, such requirements must also be conducive to performing sound agronomic practices.

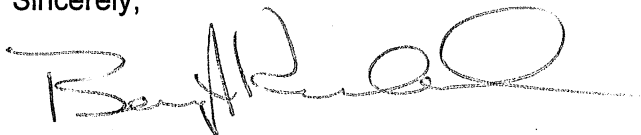
During the development of Sun-Maid's TWDR, there have been numerous references to the California League of Food Processors' (CLFP) Manual of Good Practice for Land Application of Food Processing/Rinse Water. While Sun-Maid recognizes the CLFP's report provides

guidance for wastewater application activities, its primary focus is on the use of a flood irrigation system. Flood irrigation standards should not be applied similarly to sprinkler irrigation systems. It should be clearly understood that flood irrigation has the potential to more readily percolate below the rootzone and has a higher likelihood of saturating the soil and displacing oxygen. Conversely, sprinkler irrigation systems promote greater air filled soil pore space during application and saturation conditions are avoided when sprinkler applications take place more frequently but with a smaller volume of water.

The BOD₅ loading requirement proposed by the Regional Board's staff represents an acceptable limitation. However, we strongly believe and request that the TWDR's requirement for a 3 day application cycle duration should be modified to 1) "an application period of no more than two hours, and 2) a minimum rest period of twice that of the application period."

We thank you for this opportunity to comment on the TWDR and urge you to accept the recommendations within the attached letter. We also look forward to further contact with you in preparation of the Regional Board meeting in Rancho Cordova in July.

Sincerely,



Barry F. Kriebel
President



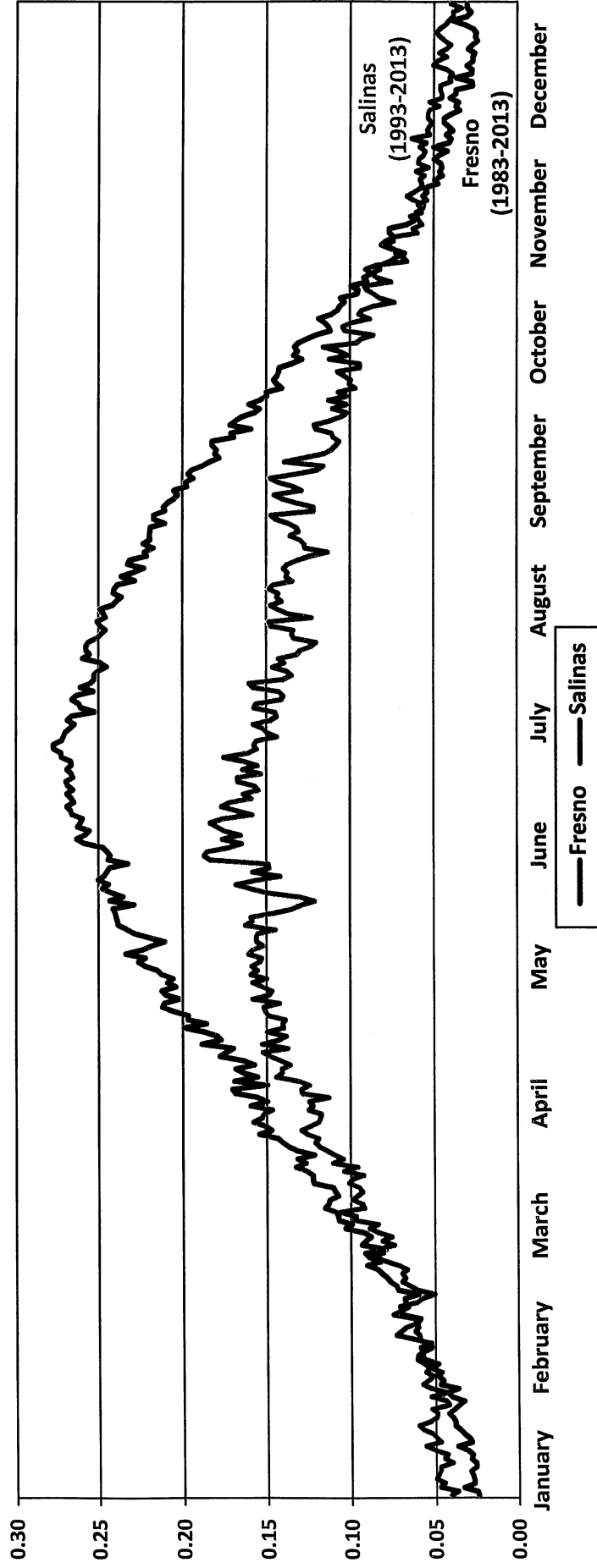
Vaughn Koligian
Director Corporate Sustainability

Encl: Letter prepared by Provost & Pritchard and Dellavalle Laboratory of June 21, 2013
Graphs (2) indicating ETo and temperature comparisons extracted from CIMIS data

Evapotranspiration (ETo)

Daily Averages for Fresno and Salinas
(30 years) (20 years)

Evapotranspiration
(Inches per Day)



Daily Evapotranspiration Average by Month (in inches)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Daily Average
Fresno	.04	.07	.12	.17	.23	.26	.26	.23	.17	.11	.06	.03	.15 (1983-2013)
Salinas	.05	.07	.10	.14	.15	.17	.14	.14	.12	.09	.06	.05	.11 (1993-2013)

Source: CIMIS (California Irrigation Management Information System)

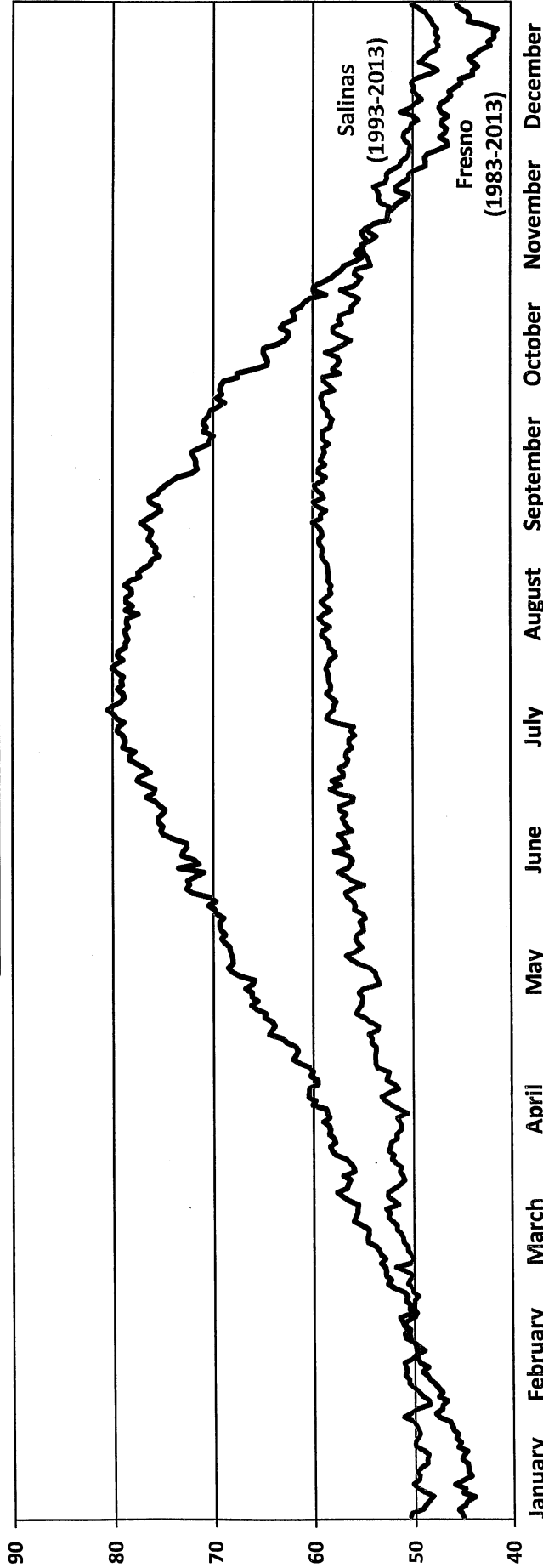
Note: Fresno data available for 1983-2013; Salinas data available for 1993-2013

Average Air Temperature (°F)

Averages for Fresno and Salinas

(30 years) (20 years)

Average Air Temperature (°F)



Average Air Temperature by Month (°F)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average
Fresno	45.7	50.3	55.6	60.6	68.1	74.5	79.2	77.3	71.9	61.9	51.2	44.6	61.7 (1983-2013)
Salinas	49.5	50.4	51.7	52.9	55.4	57.0	57.8	59.0	59.1	56.9	52.8	49.0	54.3 (1993-2013)

Source: CIMIS (California Irrigation Management Information System)
 Note: Fresno data available for 1983-2013; Salinas data available for 1993-2013